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ABSTRACT

Ebata (1985) showed that among young adolescent boys high achievement was associated with better adjustment while low achievement was associated with poorer adjustment. A study was conducted to determine whether this pattern would generalize to links between achievement and self-image for boys and to describe the pattern of relationship between achievement and self-image for girls. Data were obtained on 243 suburban adolescents who were part of a larger longitudinal study of adolescent adjustment and development. Achievement was assessed with grade point averages from sixth, seventh, and eighth grades for language, literature, mathematics, science, and social studies. Self-image was assessed with the Self-Image Questionnaire for Young Adolescents. The positive, linear relationship between achievement and adjustment for boys was replicated. For girls, cross-sectional analyses showed no relationship between achievement and self-image, while longitudinal analyses showed evidence that high achievement was associated with a decline in self-image. These effects were stronger for achievement in male-stereotyped courses, but they also existed for other courses. Preliminary findings suggest that peer acceptance may be a factor in these gender differences. (Twelve figures of data are included.) (Author/NB)

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GENDER DIFFERENCES IN PATTERNS OF ACHIEVEMENT AND ADJUSTMENT DURING EARLY ADOLESCENCE

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CG 020307

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ABSTRACT

Ebata (1985) showed that among young adolescent boys high achievement is associated with better adjustment and low achievement is associated with poorer adjustment. Specifically, his work linked achievement decline in school with depression and getting into trouble for boys, but not for girls. This research addresses the question of whether the pattern generalizes to links between achievement and self-image for boys. It also aims to describe the pattern of relationship between achievement and self-image for girls.

The positive, linear relationship bewtween achievement and adjustment for boys was replicated in this work. For girls, however, the relationship between achievement and self-image revealed mixed results. A set of cross-sectional analyses showed no relationship, while set of longitudinal analyses showed evidence that high achievement is associated with a decline in self-image. Close examination reveals that these effects are stronger for achievement in male-stereotyped courses, but that they also exist for other courses.

One hypothesis which may explain why achievement and adjustment are related in different patterns for boys and for girls pertains to a third mediating variable: peer acceptance. For girls, high achievement may be perceived to be incompatible with popularity. This may cause some conflict and ambivalence among the high achievers which affects their adjustment. Some preliminary findings lend support to this hypothesis.

SAMPLE

The sample is comprised of 243 suburban adolescents with longitudinal data at sixth, seventh, and eighth grades. These data are part of a larger longitudinal study of adolescent adjustment and development. The subjects are predominantly white and from middle and upper middle class families. They are slightly above the national norms on intelligence.

MEASURES

Achievement was assessed with end of the year grade point averages (GPAs) at sixth, seventh, and eighth grades for five basic courses: language, literature, math, science, and social studies. Self-image was assessed with the nine-scale Self-Image Questionnaire for Young Adolescents (SIQYA). The questionnaire measures these dimensions of self-image: impulse control, emotional tone, body image, peer relations, family relations, mastery and coping, vocational-educational goals, psychopathology, and superior adjustment.

METHODS

1. Patterns of achievement and self-image were examined for boys and for girls across sixth, seventh, and eighth grades with simple correlations.

2. Multivariate analyses of the variance (MANOVAs) of self-image were performed, with achievement group (high, average, and low) for each course grade and gender as the independent variables.

3. Repeated measures MANOVAs were performed to examine the patterns of change of course grades and self-image for boys and for girls as they moved from seventh to eighth grade.

4. The following set of analyses were performed to test the hypothesis that peer acceptance may be related to the paradoxical relationship between achievement and self-image for girls: Students were asked if they would rather be a) a star athlete, b) a straight A student or c) the most popular student. Repeated measures MANOVAs were run within each group to determine the relationship between the independent variable, gender, and the dependent variable, change in course grades from seventh to eighth grade.

RESULTS

1. Was the positive, linear relationship between achievement and adjustment for boys replicated? Yes, the simple correlations and MANOVAs showed that the pattern is consistent with that described by Ebata in 1985 (Figure 1).

2. What is the link between achievement and adjustment for girls? This link is paradoxical. While there are some positive correlations between the two constructs, they are small in size and in sixth and seventh grade are fewer than what would be expected due to chance. The MANOVAs show that there are a substantial number of interactions between gender and achievement level on the dependent variable, self-image (Table 1 and Figures 2-5). The repeated measures MANOVAs provide evidence that, for girls, achievement may be inversely related to self-image (Table 2 and Figures 6-9).

3. Are these effects specific to male-stereotyped courses or are they general effects? The effects appear to be stronger for male-stereotyped courses but also exist for other courses. This question will be examined in future research.

4. Can these differences in patterns of achievement and adjustment for boys and girls be attributed to a conflict between achievement and popularity for girls? Some preliminary findings suggest this may be a tenable hypothesis (Figures 10-12).

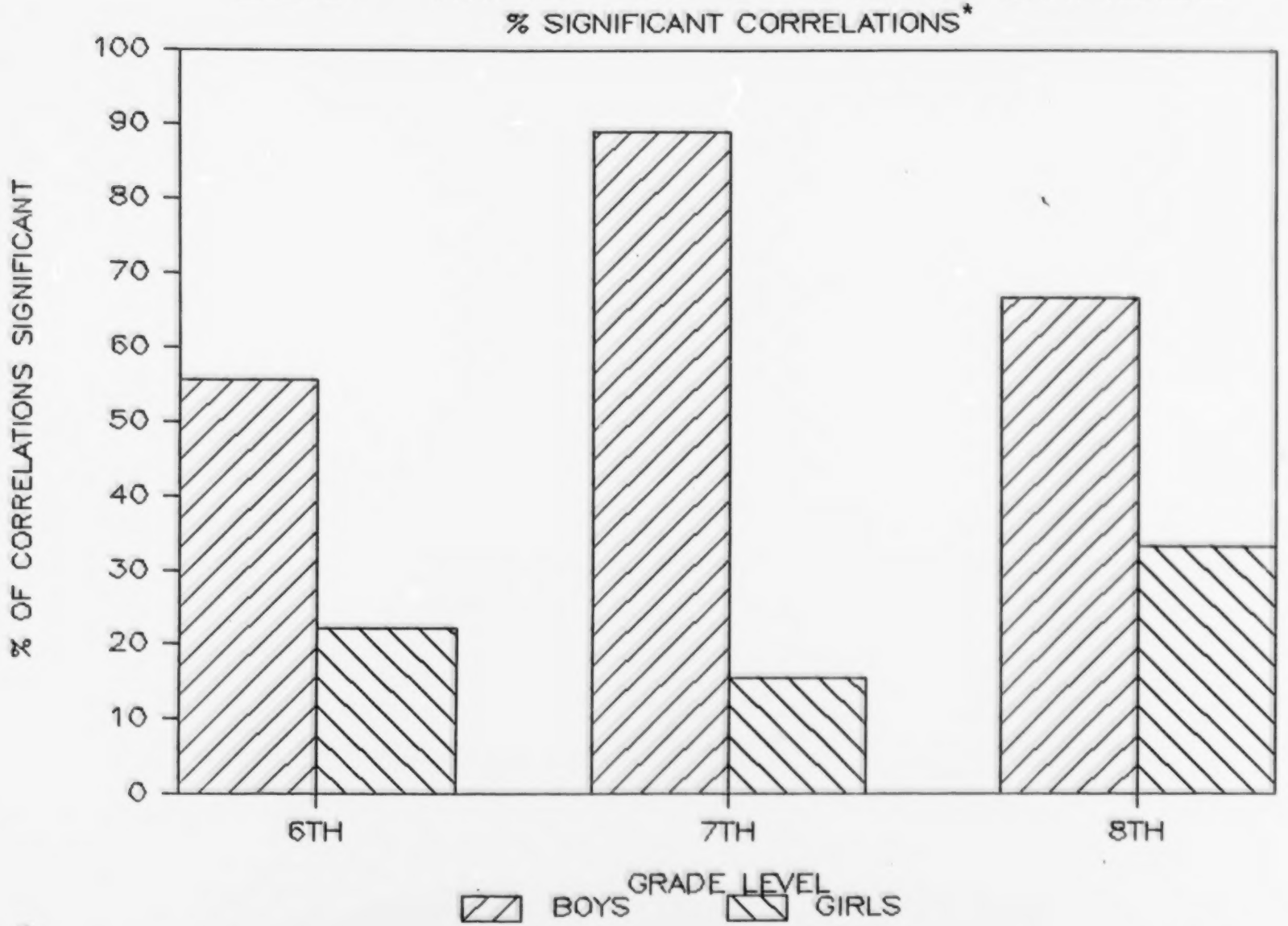
Please do not copy without consent from the author.

REFERENCE

Ebata, A. (1985). Gender differences in patterns of depression and achievement during early adolescence. Poster presented at The Society for Research on Child Development, Toronto.

FIGURE 1

SELF—IMAGE & COURSE GRADES



* 45 CORRELATIONS WERE TESTED. ALL CORRELATIONS ARE POSITIVE. N = 242

SIGNIFICANT INTERACTIONS BETWEEN BOYS AND GIRLS ON ACHIEVEMENT AND SELF-IMAGE

		S1	S2	S3	S4	S5	S6	S7	S8	S9	SIQ
LANGUAGE	6TH	X									
	7TH										
	8TH							X		X	X
LITERATURE	6TH										
	7TH		X	X			*X			X	X
	8TH							X			
MATHEMATICS	6TH										
	7TH	X	X				*X	*X	X	* X	X
	8TH						X				
SCIENCE	6TH										
	7TH	X		X			X	X			X
	8TH										
SOCIAL STUDIES	6TH					X					
	7TH							X			
	8TH							X			
SIQYA SUMMARIES SIGNIFICANT INTERACTIONS (PERCENT)		20	13	13	0	7	27	40	7	20	27

* THESE INTERACTIONS REPRESENT THE MOST EXTREME DIFFERENCES BETWEEN BOYS AND GIRLS WITH A TEST OF EQUIVALENCE OF COVARIANCE STRUCTURES.

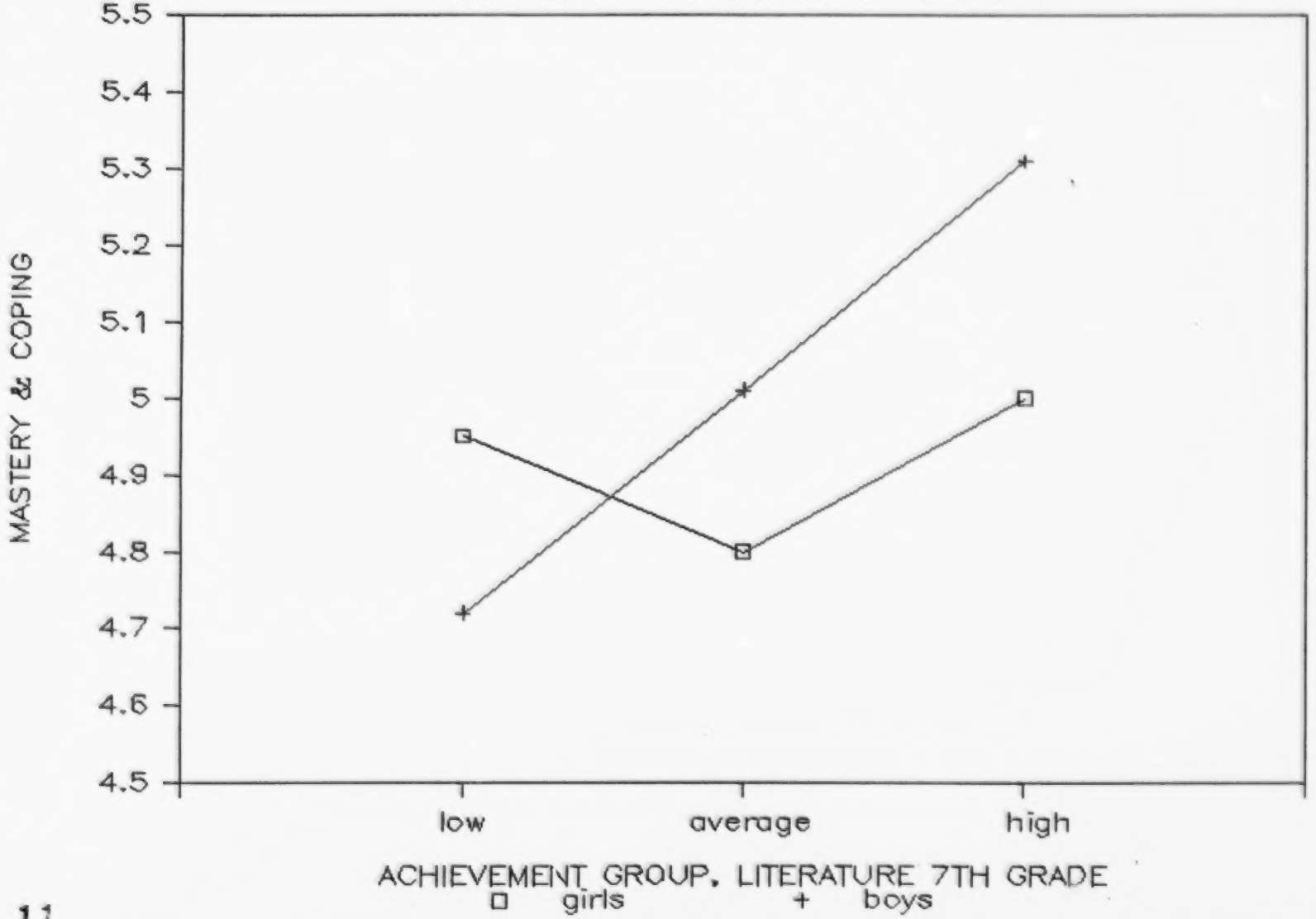
TABLE 1

See Table 2 for descriptions of self-image scales S1 - SIQ.

FIGURE 2

RELATIONSHIP BETWEEN ACHIEVEMENT

AND MASTERY & COPING BY GENDER

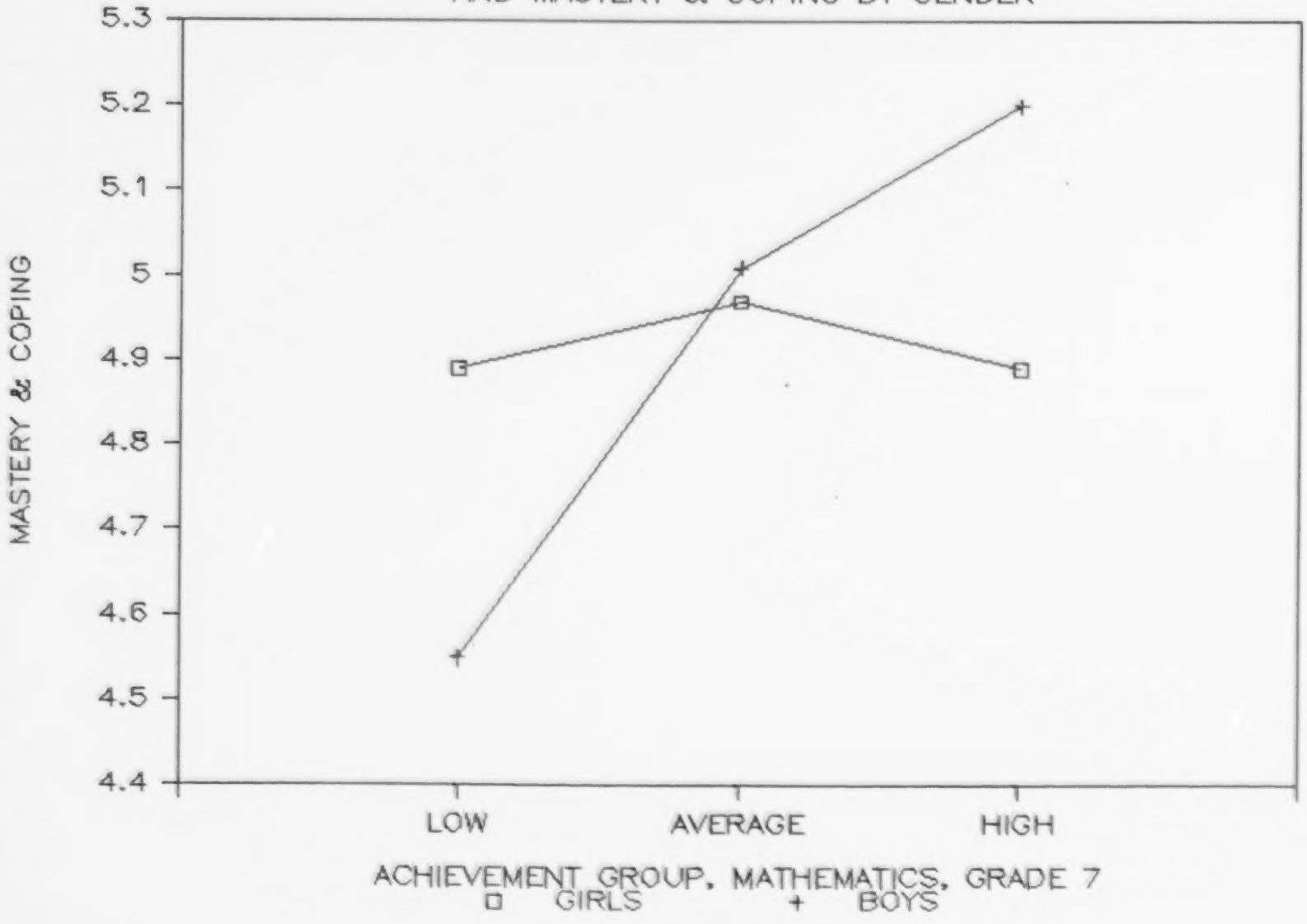


N = 242 P VALUE FOR INTERACTION = .006

FIGURE 3

RELATIONSHIP BETWEEN ACHIEVEMENT

AND MASTERY & COPING BY GENDER

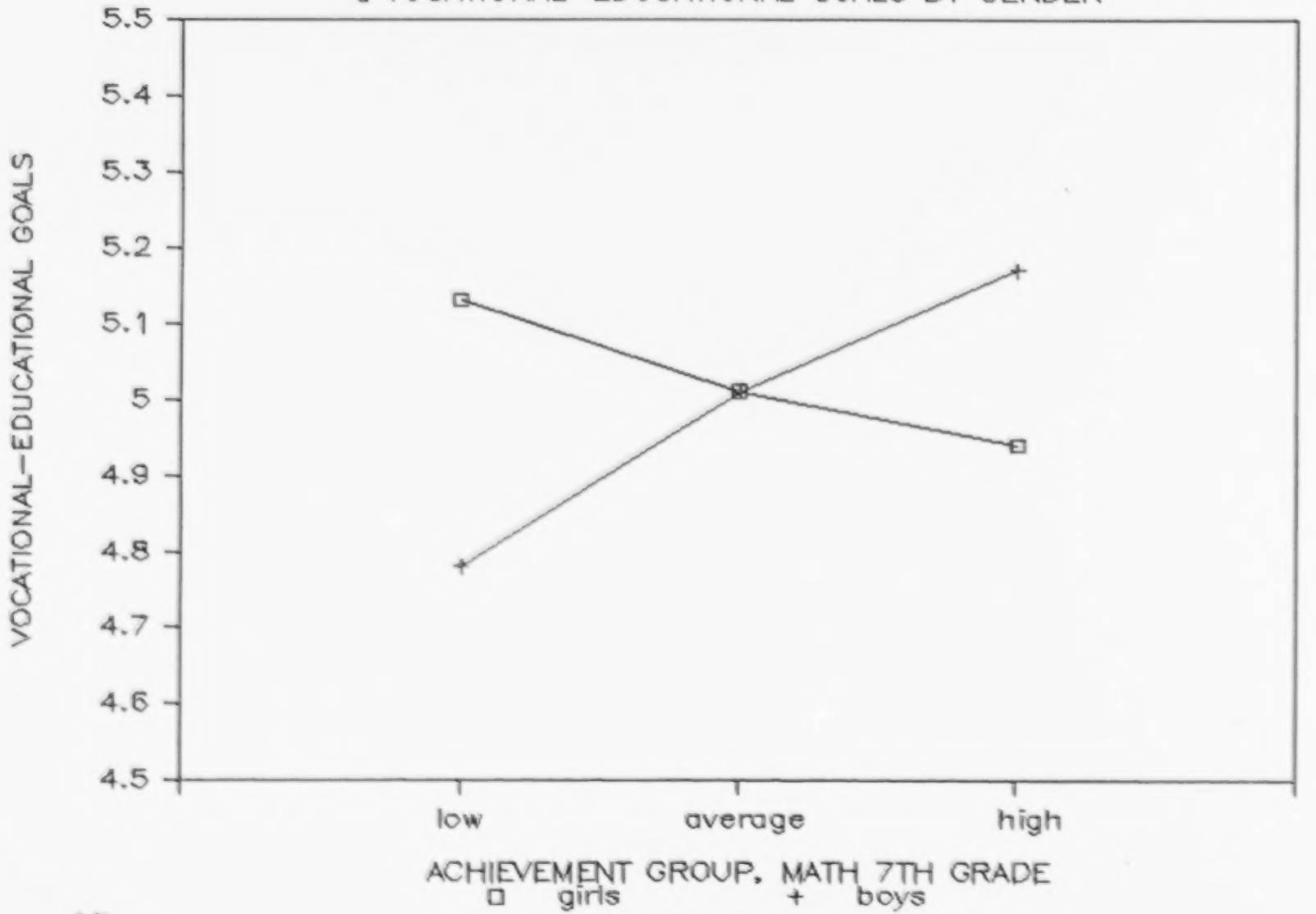


N = 242 P VALUE FOR INTERACTION = .002

FIGURE 4

RELATIONSHIP BETWEEN ACHIEVEMENT

& VOCATIONAL–EDUCATIONAL GOALS BY GENDER

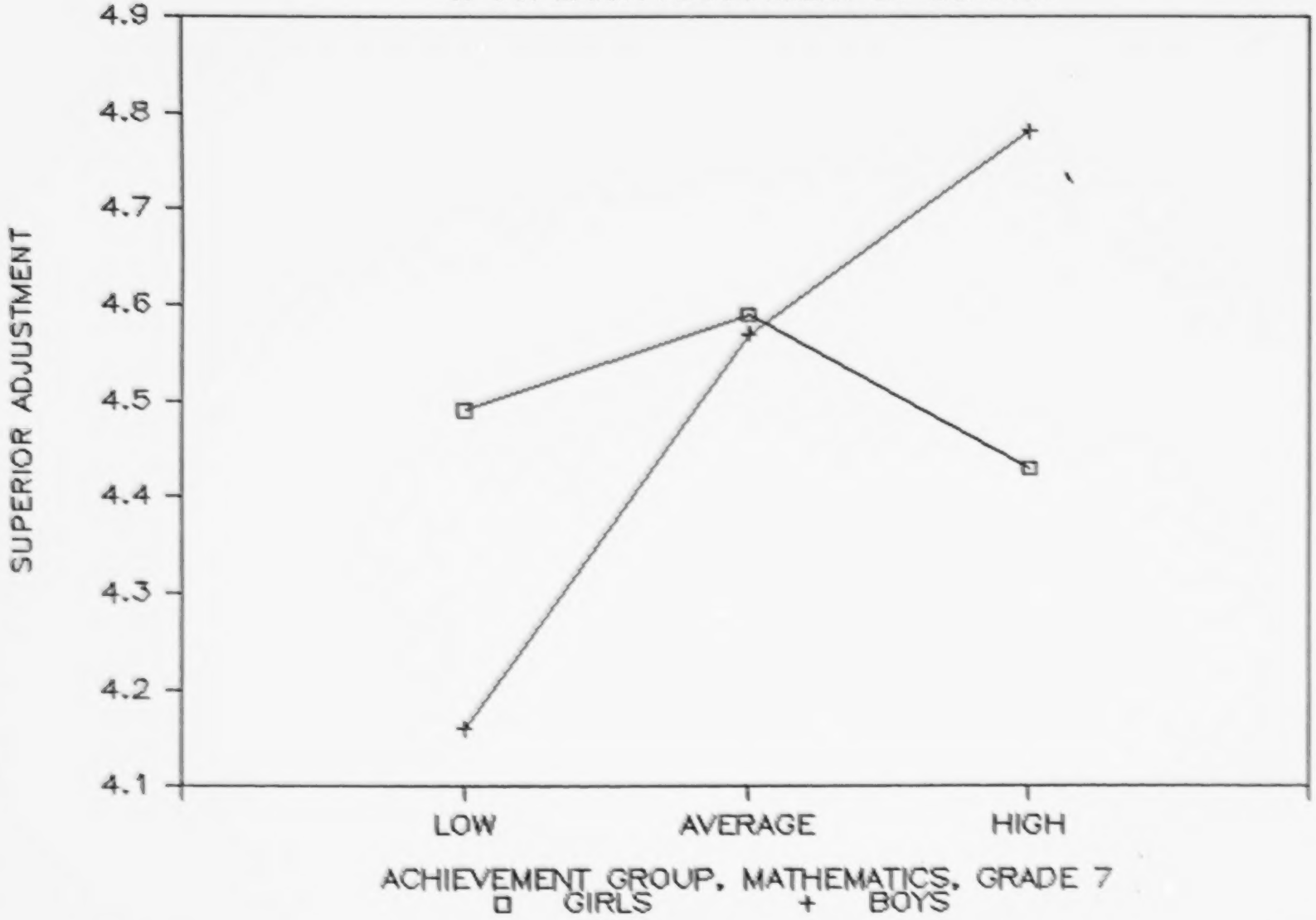


N = 242 P VALUE FOR INTERACTION = .007

FIGURE 5

RELATIONSHIP BETWEEN ACHIEVEMENT

& SUPERIOR ADJUSTMENT BY GENDER



N = 242 P VALUE FOR INTERACTION = .002

SUMMARY OF INTERACTIONS BETWEEN TIME AND GENDER
WITH SELF-IMAGE AS THE DEPENDENT VARIABLE

	S1	S2	S3	S4	S5	S6	S7	S8	S9	SIQ	TOTAL
OVERALL GPA			X				X				20%
LITERATURE											0
LANGUAGE					X				X		20%
MATHEMATICS						X	X		X	X	40%
SCIENCE											0
SOCIAL STUDIES											0

S1 - IMPULSE CONTROL
S2 - EMOTIONAL TONE
S3 - BODY IMAGE
S4 - PEER RELATIONS
S5 - FAMILY RELATIONS
S6 - MASTERY & COPING
S7 - VOCATIONAL-EDUCATIONAL GOALS
S8 - PSYCHOPATHOLOGY
S9 - SUPERIOR ADJUSTMENT
SIQ - AVERAGE SELF-IMAGE

All subjects in this analysis declined from the high achievement group at time 1 (7th grade) to the average achievement group at time 2 (8th grade).

TABLE 2

FIGURE 6

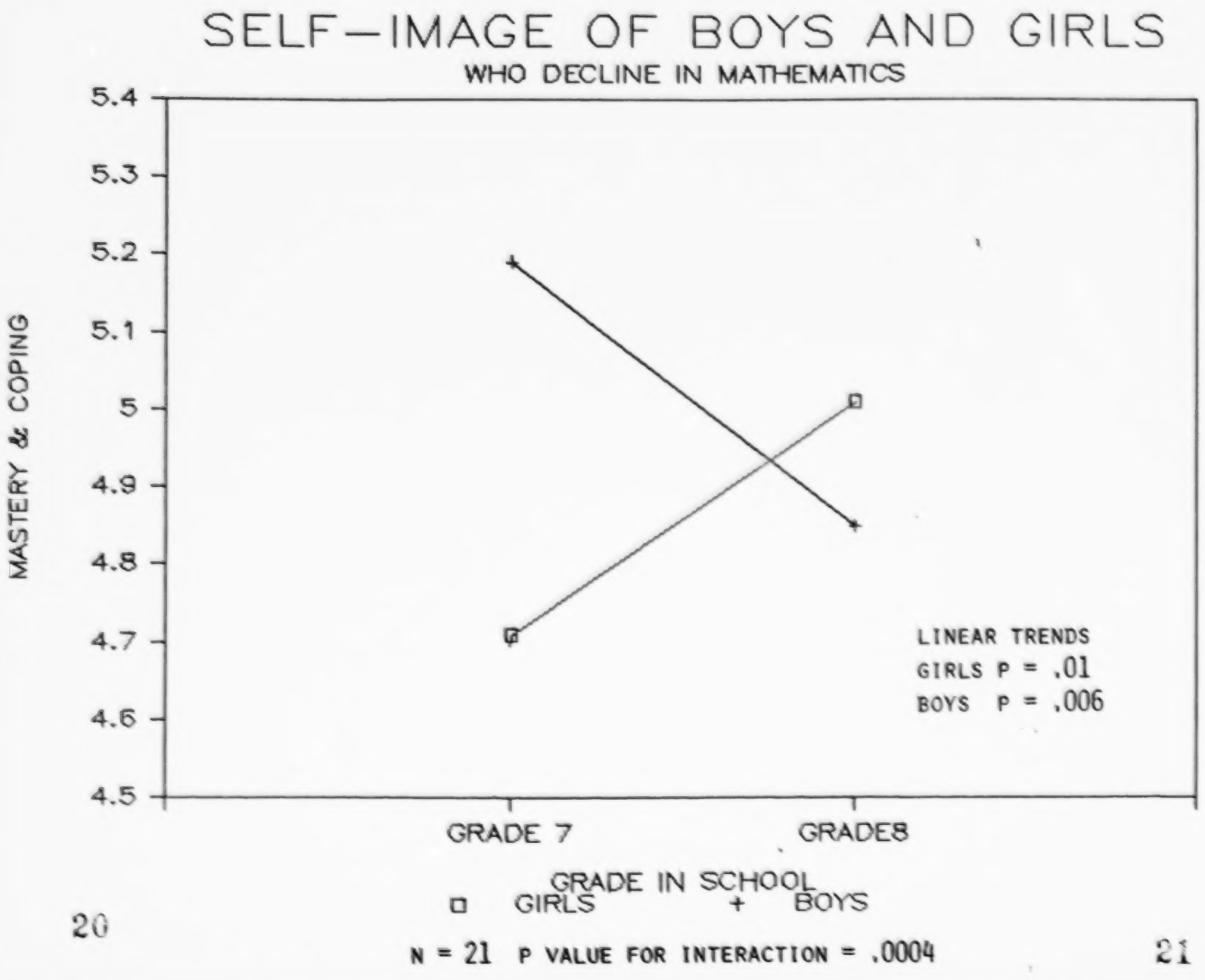
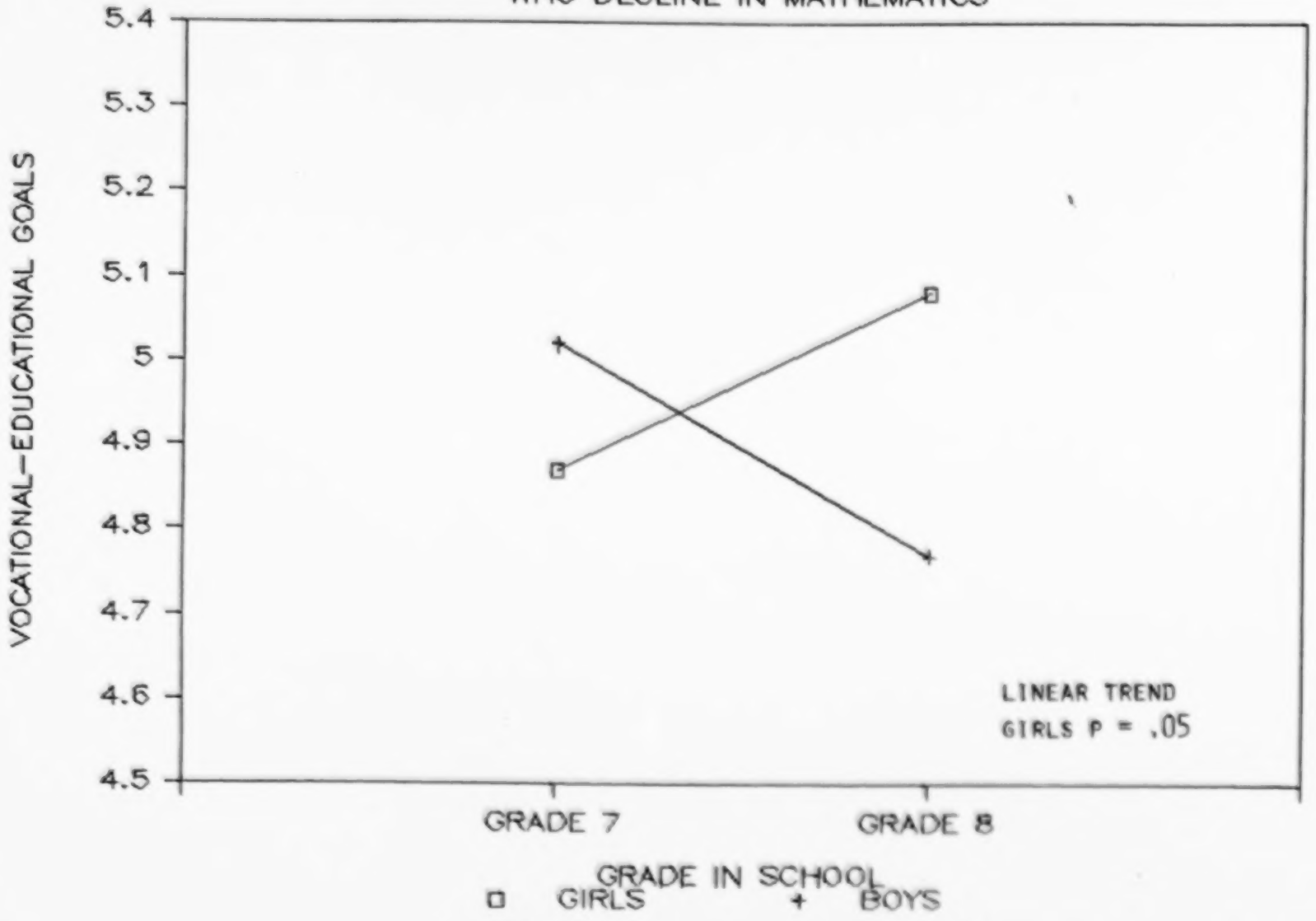

SELF—IMAGE OF BOYS AND GIRLS
WHO DECLINE IN MATHEMATICS
MASTERY & COPING
5.4
5.3
5.2
5.1
5
4.9
4.8
4.7
4.6
4.5
LINEAR TRENDS
GIRLS P = .01
BOYS P = .006
GRADE 7
GRADE8
GRADE IN SCHOOL
□ GIRLS + BOYS
N = 21 P VALUE FOR INTERACTION = .0004

FIGURE 7

SELF—IMAGE OF BOYS AND GIRLS

WHO DECLINE IN MATHEMATICS

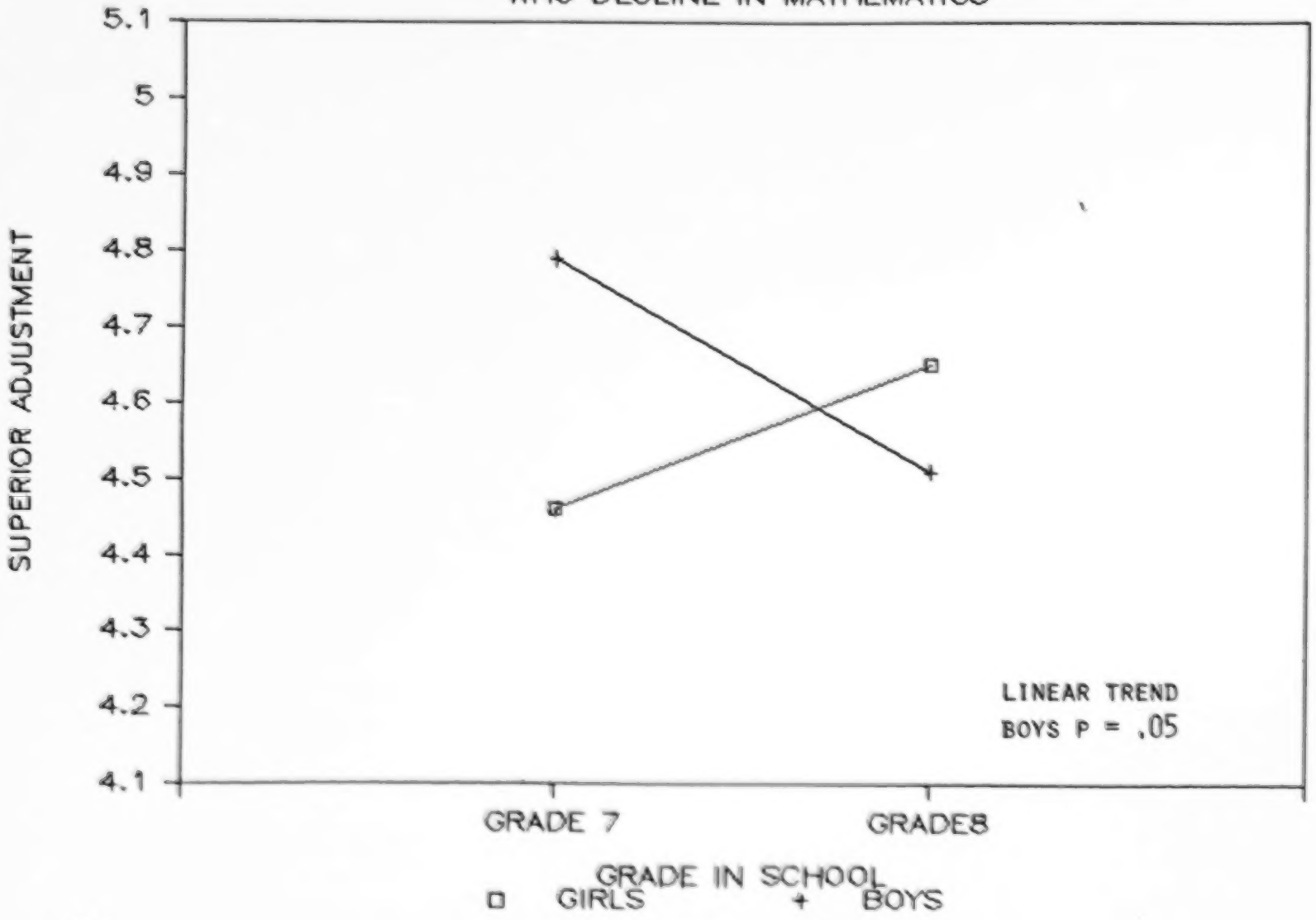


N = 21 P VALUE FOR INTERACTION = .01

FIGURE 8

SELF–IMAGE OF BOYS AND GIRLS

WHO DECLINE IN MATHEMATICS

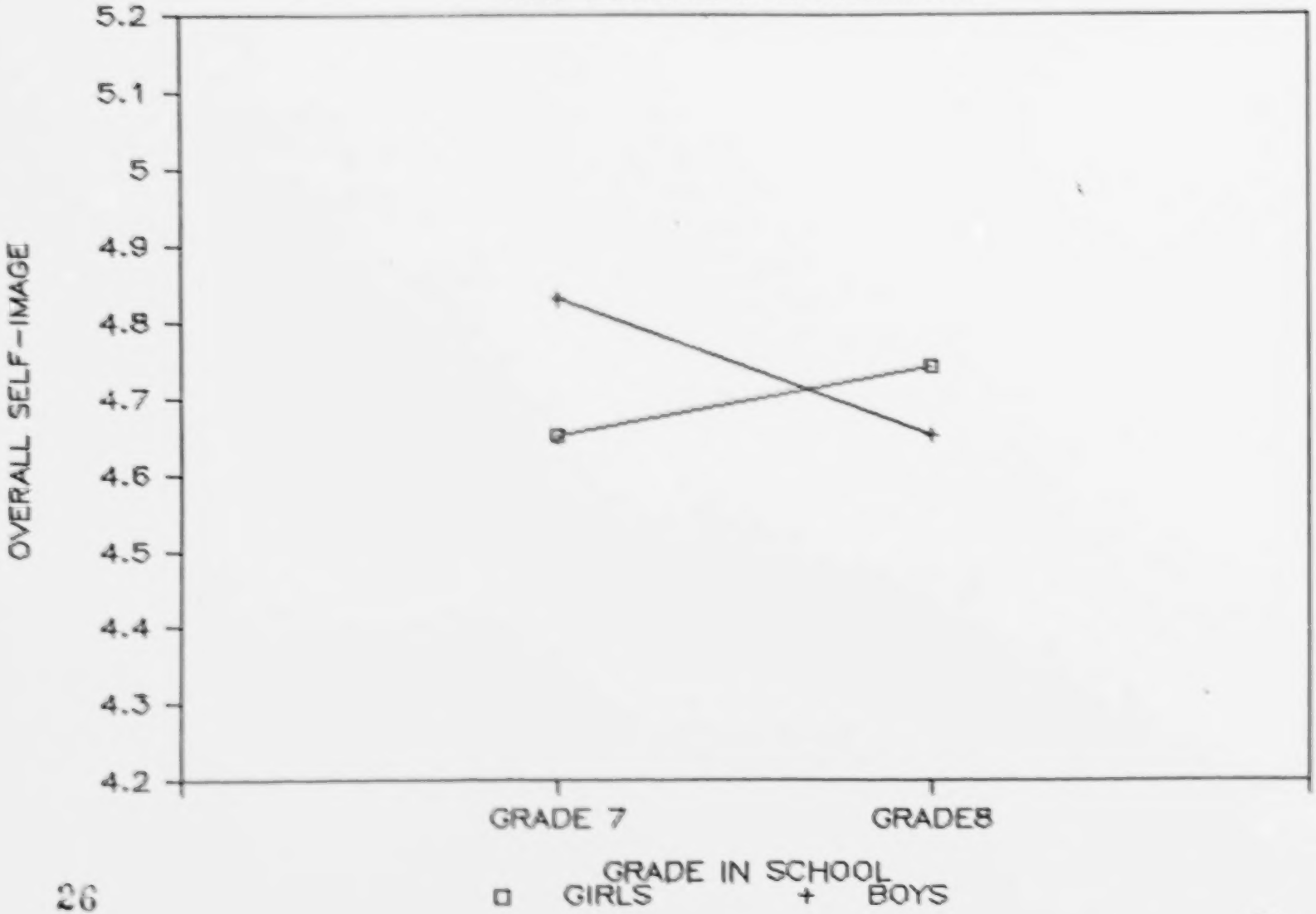


N = 21 P VALUE FOR INTERACTION = .01

FIGURE 9

SELF-IMAGE OF BOYS AND GIRLS

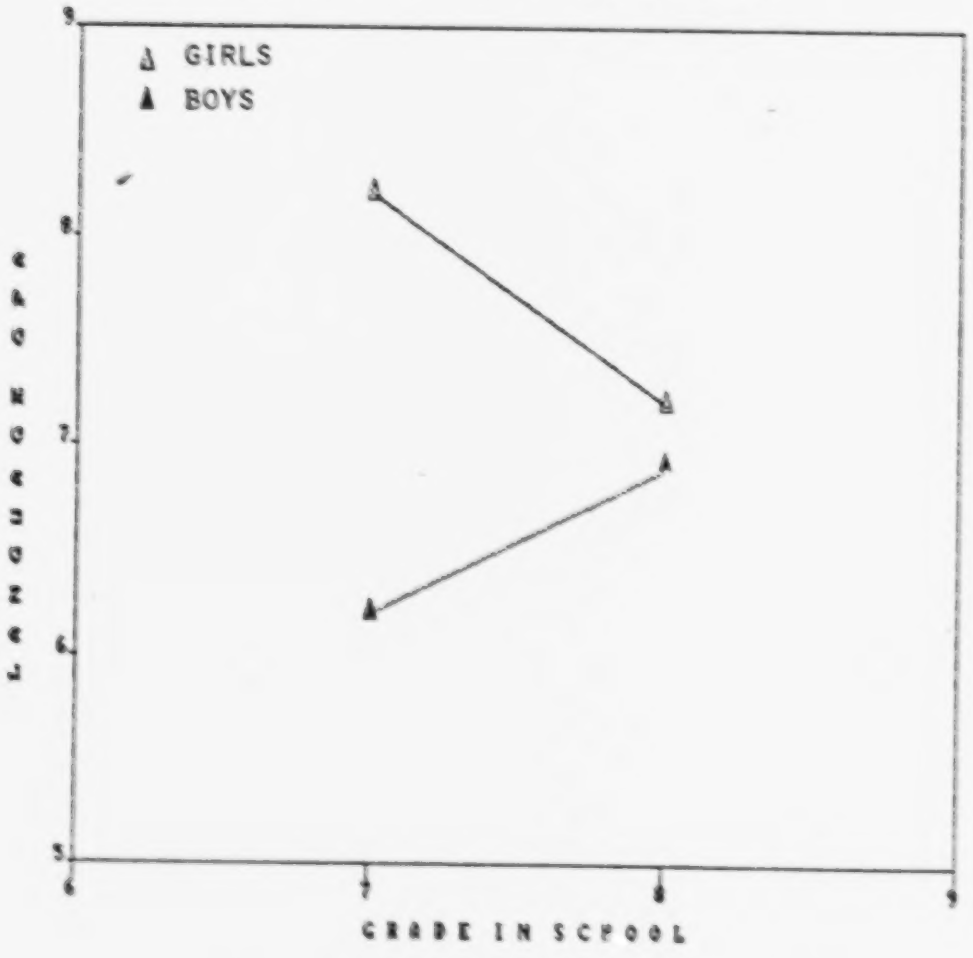
WHO DECLINE IN MATHEMATICS



N = 21 P VALUE FOR INTERACTION = .04

LANGUAGE GPA CHANGES

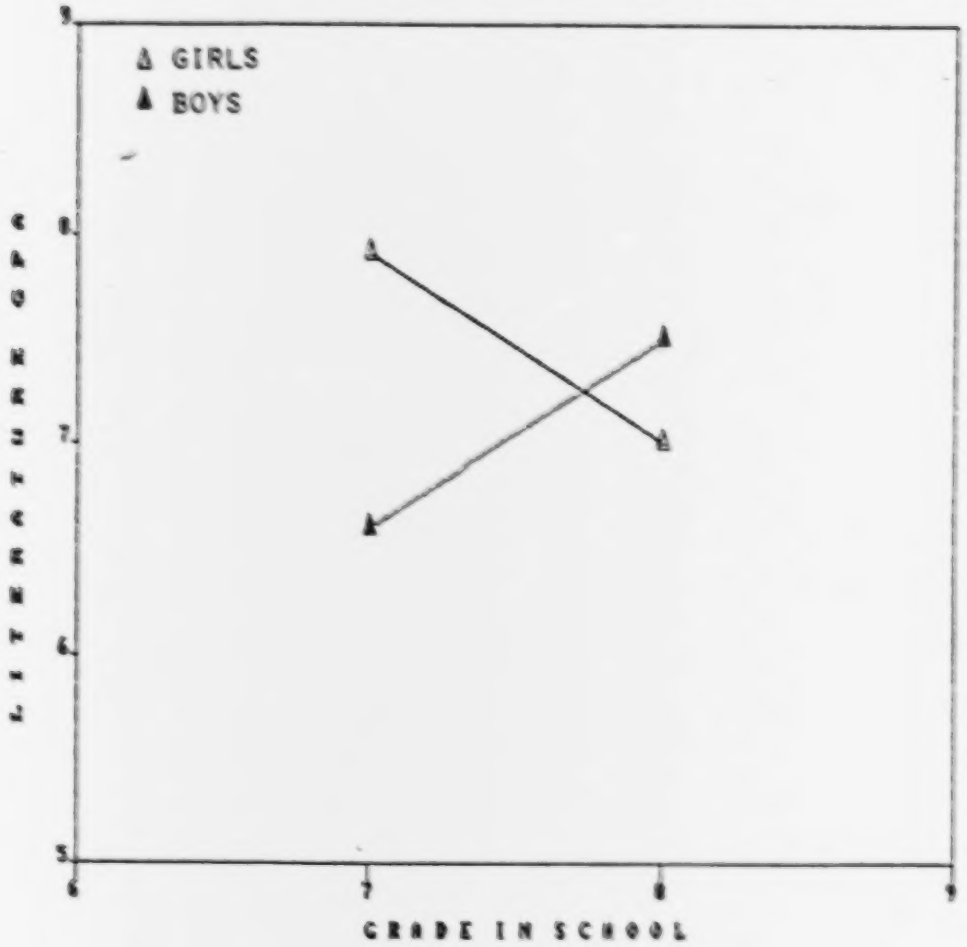
OF STUDENTS WHO VALUE POPULARITY



N = 19 P VALUE FOR INTERACTION = .08

FIGURE 10

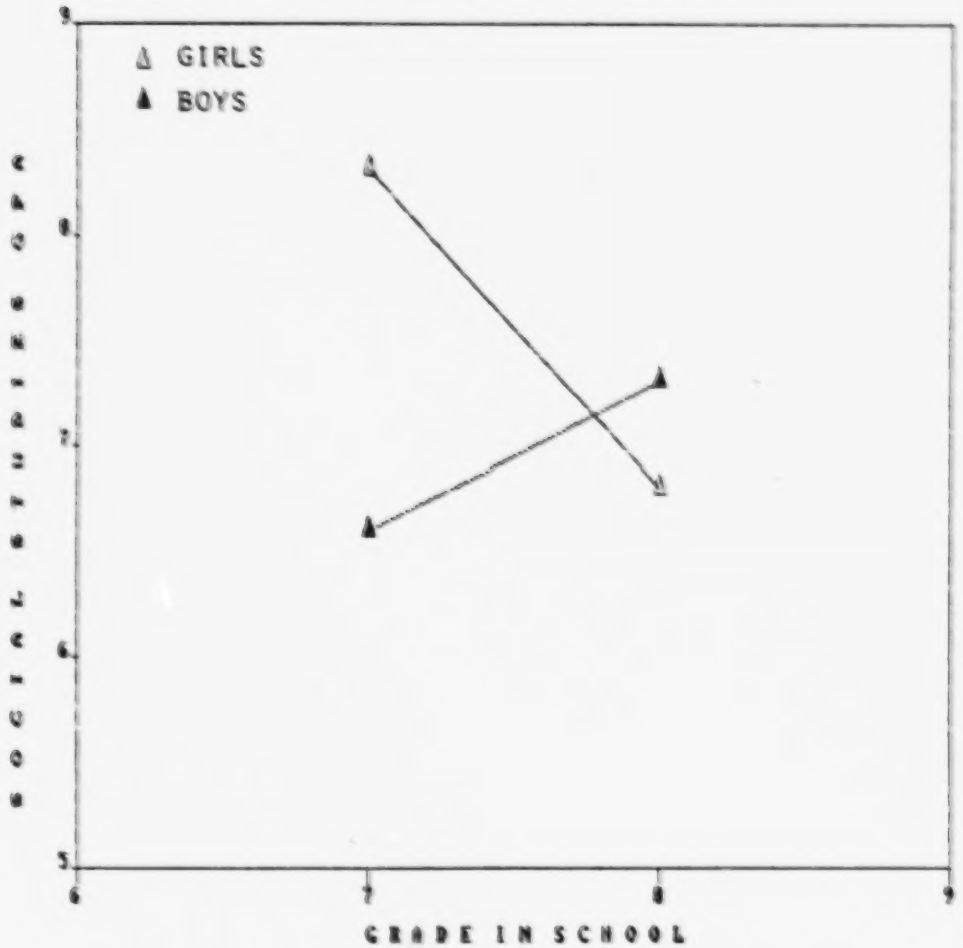
LITERATURE GPA CHANGES
OF STUDENTS WHO VALUE POPULARITY



N = 19 P VALUES FOR INTERACTION = .02

FIGURE 11

SOCIAL STUDIES GPA CHANGES
OF STUDENTS WHO VALUE POPULARITY



N = 19 P VALUE FOR INTERACTION = .03

FIGURE 12